#### **Tuberculosis**

# Summary of Methods and Data for Estimate of Costs of Illness

Estimated Total Economic Cost
 Estimated Direct Cost
 Estimated Indirect Cost
 Reference Year
 Not Available
 Not Available
 1991

Reference Year 1991
IC Providing the Estimate NIAID

Direct Costs Include: Other related nonhealth costs

Yes

**Indirect Costs Include:** 

Mortality costs

Morbidity costs: Lost workdays of the patient

No
Morbidity costs: Reduced productivity of the patient

No
Lost earnings of unpaid care givers

No
Other related nonhealth costs

No

Interest Rate Used to Discount Out-Year Costs

Not Available

2. Category code(s) from the International Classification of Diseases, 9th Revision, Clinical Modification, (ICD-9-CM) for all diseases whose costs are included in this estimate: <u>010.1-</u>016.9; 017.1-018.9.

3. Estimate Includes Costs:

Of related conditions beyond primary, strictly coded ICD-9-CM category No Attributable to the subject disease as a secondary diagnosis No

Of conditions for which the subject disease is an underlying cause No

4. Population Base for Cost Estimate (Total U.S. pop or other)

Total U.S. pop.

5. Annual (prevalence model) or Lifetime (incidence model) Cost: Annual

6. Perspective of Cost Estimate (Total society, Federal budget, or Other) Total Society

7. Approach to Estimation of Indirect Costs

Not Available

### 8. Source of Cost Estimate:

Brown, RE, et al. Health-care Expenditures for Tuberculosis in the United States. Arch Intern Med. Vol. 155: 1595-1600.

# 9. Other Indicators of Burden of Disease:

An estimated 10-15 million people in the U.S. are currently infected with *Mycobacterium tuberculosis*, and approximately 2,000 persons die each year from tuberculosis (TB). In the U.S. a total of 18,361 new cases of tuberculosis were reported to the CDC in 1998. This represents an 8% decrease from 1997, and continues the downward trend first noted in 1993. Despite this progress, 12 states reported either no change or an increase in the number of TB cases between 1997 and 1998 [CDC, MMWR 48(33):732, 1999]. During 1998, approximately 75% of active cases of TB were reported among racial and ethnic minorities. The total number of reported cases of TB in the U.S. decreased by 7.5% in 1998 compared to 1997 in all racial/ethnic groups. In 1998, drug resistant strains of TB accounted for approximately 1.1% of total TB cases in the U.S. for which drug-susceptibility results were reported [CDC, MMWR 48(33):732, 1999].

# 10. Commentary:

Medical care costs included: screening and follow up examinations, preventive treatment, outpatient treatment for suspected cases, and inpatient hospitalization with related physician services. Other related nonhealth costs included surveillance and outbreak control by the CDC and contact investigations by local public health departments. Indirect costs due to death or lost productivity were not included.

Estimates of surveillance and outbreak control costs were based only on CDC expenditures because the state and city TB programs were unable to identify expenditures by type of activity. Screening expenditures were estimated by compiling information from organizations known to conduct TB screening; however, little data were available on screening activities or the number of individuals screened and therefore the estimate for screening expenditures is incomplete.

Estimates of the resources for contact investigations and preventive treatment were based upon responses from a small survey of TB programs and do not capture preventive therapy in private physician offices. The data were limited due to the scarcity and variability of these figures.

Analysis of variation in estimates provided a range of expenditures from \$515 million to \$750 million.